



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D205-634-041
Job Sheet 169817



Part No: D205-634-041

Job Qty: 1 ea

Part Name: Replacement Skidtube with Standard Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 12/22/17

Job Tracking No:

Due Date: 1/31/18

Created By: Mario Poulin

Type: SOLD

Description:

Customer: California Department Of Forestry & Fire Protection (CCAL101)

5500 Price Avenue McClellan, CA, 95652 USA ph:(916) 561-3359

Note: DWG REV H SHEETS 1,2,3,8 IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30 KJ IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD IPP Rev. O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q 10.12.01 as per chg003 DD ver:EC IPP REV:R 12.01.23 AS PER ECN11-684 VER:EC IPP REV:S 17.12.08 REMOVE GASKET AS PER INTUITIVE INFO DD VER:FJS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	1/30/18	1/30/18	0.00	0.00	Start Up Skidtubes		
110	CNC Bend Skidtubes	1 pcs	1/30/18	1/30/18	0.00	0.65	CNC Bend Skidtube		M6/11
120	Skidtubes	1 pcs	1/30/18	1/30/18	0.00	2.89	Skidtubes-2		M6/11
130	QC	1 pcs	1/30/18	1/30/18	0.00	0.00	QC5		M6/11
140	Skidtubes	1 pcs	1/30/18	1/30/18	0.00	2.89	Skidtubes-2		M6/11
150	QC	1 pcs	1/30/18	1/30/18	0.00	0.00	QC10		38
160	QC	1 pcs	1/30/18	1/30/18	0.00	0.00	QC5		38
170	HandFinish	1 pcs	1/30/18	1/30/18	0.00	1.31	HandFinish2		20:8/02/07
180	Powdercoat	1 pcs	1/30/18	1/30/18	0.00	0.34	Powdercoat1		18-2-09
190	QC	1 pcs	1/30/18	1/30/18	0.00	0.00	QC3		18-2-09
200	HandFinish	1 pcs	1/31/18	1/31/18	0.00	1.31	HandFinish3		18-2-09
210	QC	1 pcs	1/31/18	1/31/18	0.00	0.00	QC5		38
215	DC	1 pcs	1/31/18	1/31/18	0.00	0.00	DC		38
220	Packaging	1 pcs	1/31/18	1/31/18	0.00	0.00	Packaging3-1		38
230	QC21-FG	1 Ea	1/31/18	1/31/18	0.00	0.00	QC21		38

Part Op 110 - 1-Bend as per program D2580.C on CNC Bender and Folio 16 2-Cut tubes as per Dwg D2580 3- scribe batch# in Descriptions: aft end of tube

120 - 1- Deburr ends and remove bending marks 2- Prepare tube for welding as per QSI 004

140 - 1-Weld step D2576 as per Dwg. D2580 and QSI 004 2-Grind welds on step as per Dwg D2580 3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension. 4-Drill holes for wearplates using DT 8217 & DT8937, 7.40" from most fwd saddle holes (ref only) Open holes to 19/64", adjust stopper not to hit web. Deburr 6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr 7-Drill pilot holes for Tow ring using DT8091, open to .640"and Deburr

170 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

180 - START TIME: 8:30 OVEN TEMPERATURE: 325° FINISH TIME: 7:00

200 - 1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates: A/R Sikaflex-291 _____ Sikaflex expire date: _____ 2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580 3-Inspect for foreign object per QSI 024 4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive A/R Sikaflex-291 _____ Sikaflex expire date: _____

5-Wing Walk as per Dwg D2580 and QSI 005 4.4 Batch: _____

210 - Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

215 - Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG006

220 - Identify and pack for shipping as per PPPD205-634-041 Location: _____ PPP Rev: _____

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D2580-1 S035330	1	7	0	0
140-Skidtubes	D2576-3 B156023	1	58	0	0
	D4202-1 S030798	20	719	0	0
200-HandFinish	ALS7-1032-130 S007279	50	1,947	0	0
	AN3-5A S013737-1	2	469	0	0
	AN3C4A S014894	50	2,839	0	0
	D2594-1 S025442	16	615	0	0
	D2594-3 S035836	16	282	0	0
	D2855 F147805	1	84	0	0
	D3564-11 S018160	1	29	0	0
	D3564-13 S024217	1	33	0	0
	D3564-5 S015902	1	43	0	0
	D3564-9 S023933	1	27	0	0
	NAS1149C0332R S019980	50	4,920	0	0
	NAS1149D0332J S020606	2	3,503	0	0

Part Specifications

Specifications could not be found.

Plex 12/22/17 2:34 PM dart.poulin.mario

DART
AEROSPACE
S039644

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1270 Aberdeen Street
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CANADA
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www.dartaerospace.com



Replacement Skidtube with Standard Wearplates Fits LH or RH

PART NO: D205-634-041

Original Serial #: S039644

Revision:

Operation: Start up Operation 02/06/18

Change No: CHG006

Job No: 169817

ITEM	QTY -041	QTY -045	QTY -047	QTY -049	PART NUMBER	DESCRIPTION
1	X				D2580-041	SKIDTUBE ASSEMBLY
2		X			D2580-045	SKIDTUBE ASSEMBLY
3			X		D2580-047	SKIDTUBE ASSEMBLY
4				X	D2580-049	SKIDTUBE ASSEMBLY
20	1	1	1	1	D2500-1-190	EXTRUSION
21			16	16	D2570	BUSHING
22	1	1	1	1	D2576-3	STEP
23		4			D2579	SPACER
24	16	16	8	8	D2594-1	PLUG
25	16	16	8	8	D2594-3	O-RING
26	1	1	1	1	D2596	205 WEB
27	1	1	1	1	D2555	AFT CAP
28	1	1			D3554-5	WEARSHOE
29	1	1			D3554-9	WEARSHOE
30	1	1			D3554-11	WEARSHOE
31	1	1			D3554-13	WEARSHOE
32	20	20	24	24	D4202-1	SPACER
33			1		D4405-041	WEARPLATE ASSEMBLY
34			1		D4405-043	WEARPLATE ASSEMBLY
35				1	D5051-1	FWD WEARPLATE
36				1	D5051-3	AFT WEARPLATE
50	50	50			ALS7-1032-130 or AK57-1032-130 or AK54-1032-130 or AEL5-1032-130	INSERT
51	50	50			AN3C4A	BOLT
52	2	2	2	2	AN3-5A	BOLT
53			8	8	AN4-45A	BOLT
54	50	50			NAS1149C0332R	WASHER (AN980C10L)
55	2	2	2	2	NAS1149D0332J	WASHER (AN980JD10L)
56			8	8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT (-041/-047/-049) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT (-045) GREEN SANDTEX (REF 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 33.7 lbs
D2580-045 = 33.7 lbs
D2580-047 = 45.1 lbs
D2580-049 = 32.0 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL 20.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241-291.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047/-049)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2555 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

H	SHEET: PL DELETE D3556-1/5-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS	SAD	17.06.09
G	ADDED -048, -047 WEIGHT UPDATED PER DSI 9598	AJS	14.04.09
F	INCORPORATE DEO D2580-E-1 PER PAR12-218	DC	13.08.20
E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO 85 WEARPLATES AND GASKETS, INCLUDE DEO 8124/ 9183	PH	07.04.06
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	06.08.26
B	AS MANUFACTURED	DS	06.12.02
A	NEW ISSUE	DS	06.08.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	SAD		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	17.06.09		

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HAWKESBURY, ONTARIO, CANADA

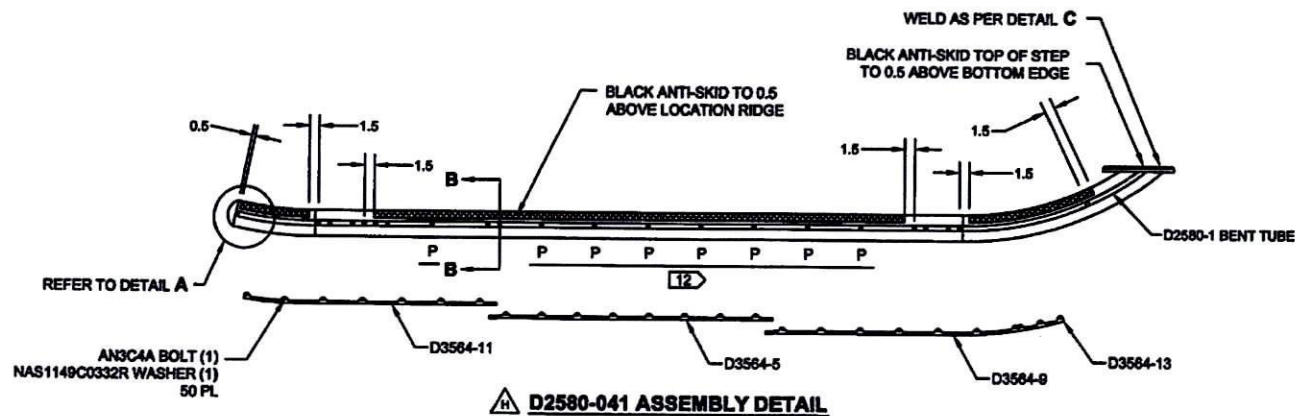
DRAWING NO. D2580
REV. H
SHEET 1 OF 8

TITLE 205 SKIDTUBE ASSEMBLY
SCALE NTS

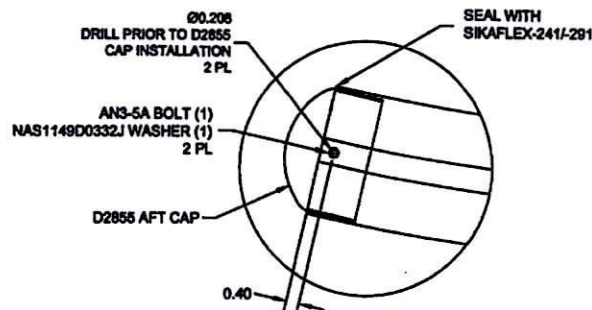
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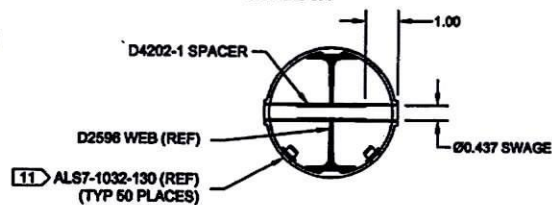
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DETAIL A
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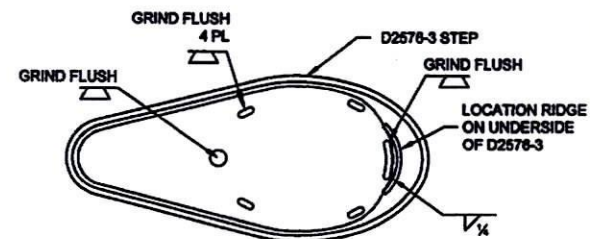


SECTION B-B
SCALE 5X



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (20 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

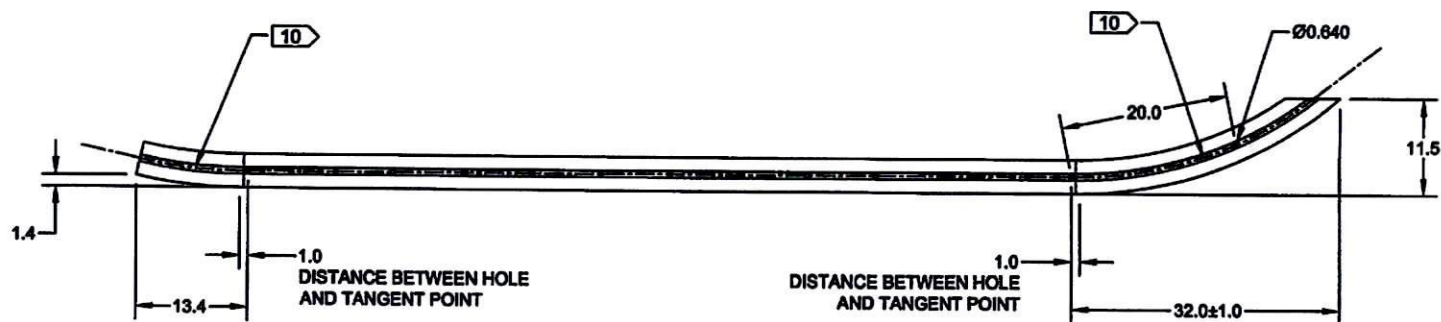
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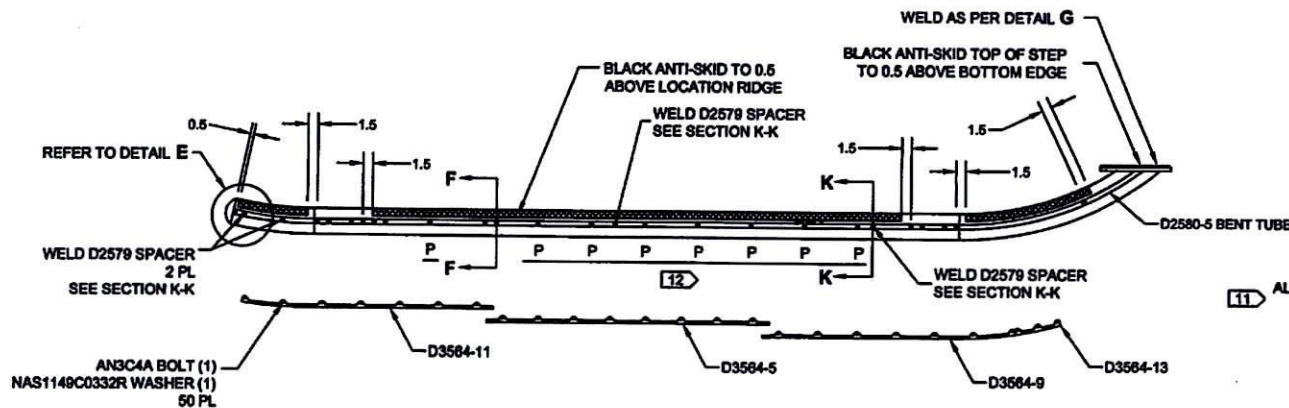
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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 2 OF 9
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	205 SKIDTUBE ASSEMBLY	NTS
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D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

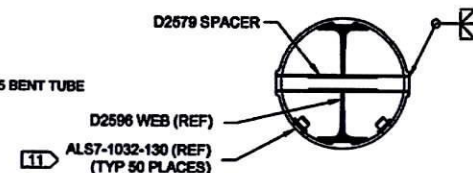
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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 3 OF 8
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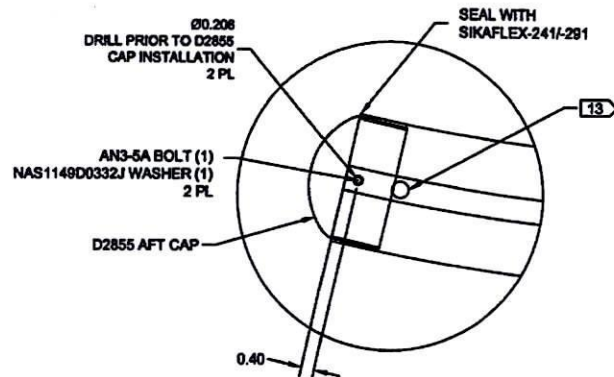
D2580-045 ASSEMBLY DETAIL

**SECTION K-K
SCALE 5X**

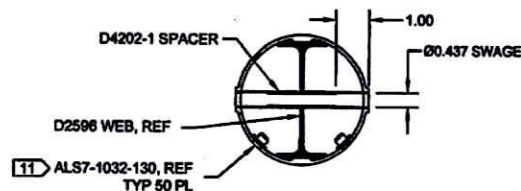


AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (4 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. DO NOT CBORE

**DETAIL E
SCALE 5X**

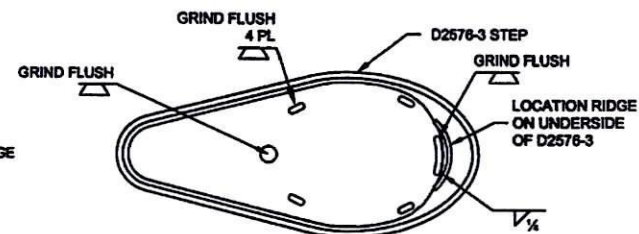


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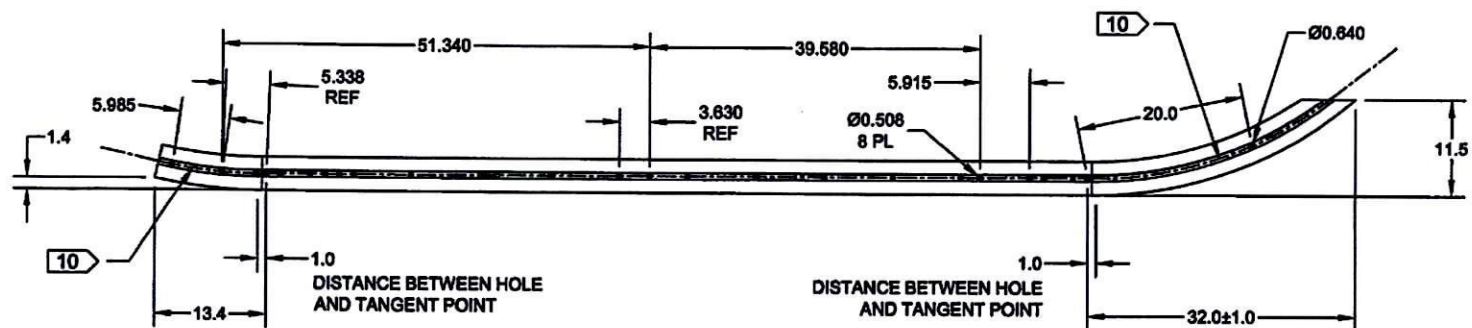
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (20 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002

**DETAIL G
SCALE 5X**



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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 4 OF 9
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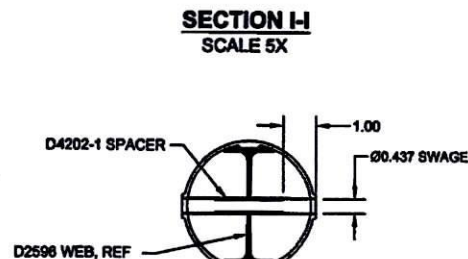
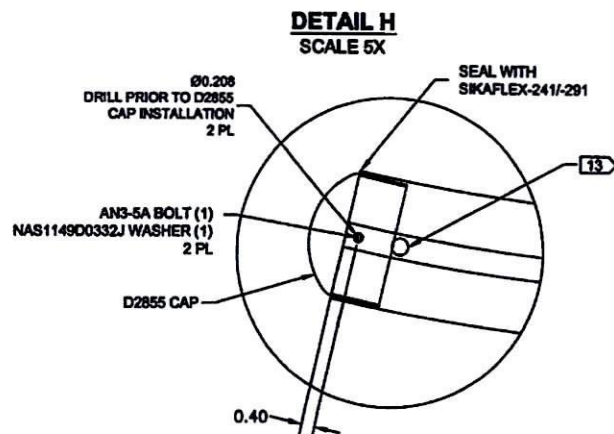
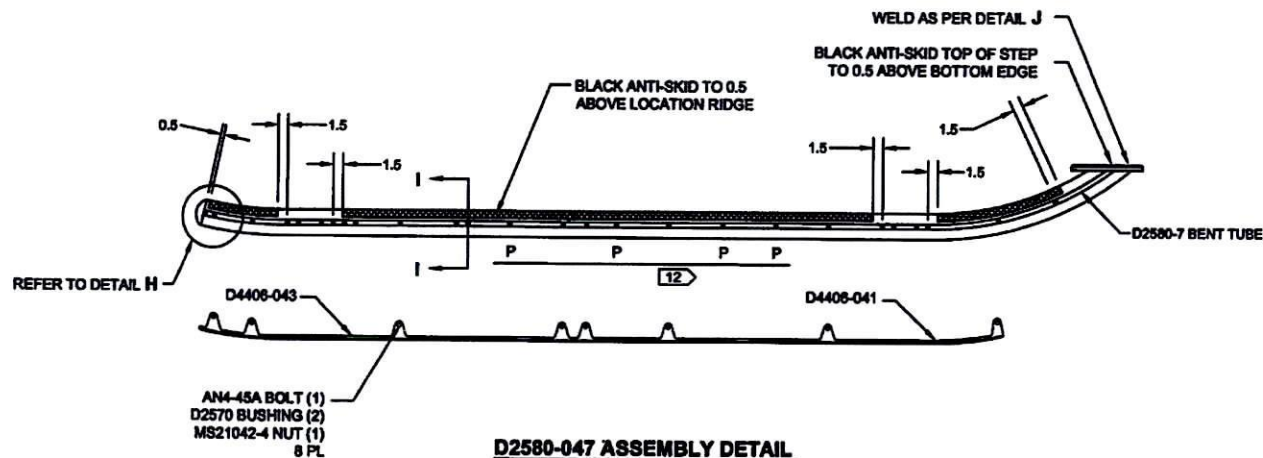


D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

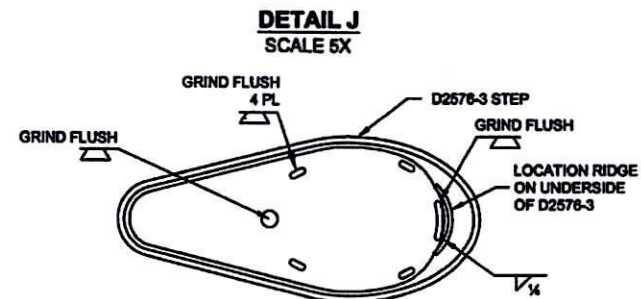
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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 5 OF 9
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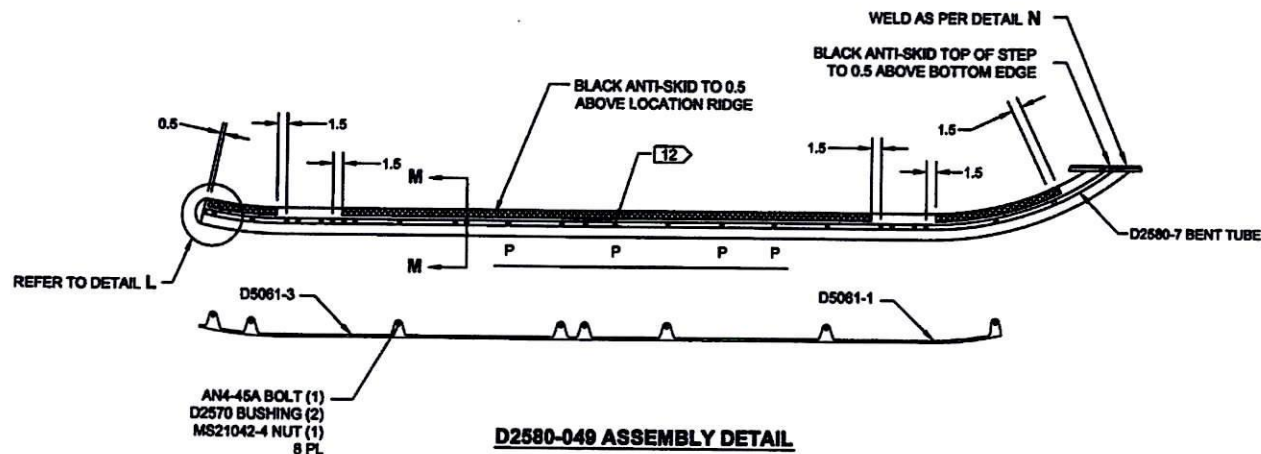
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (24 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002



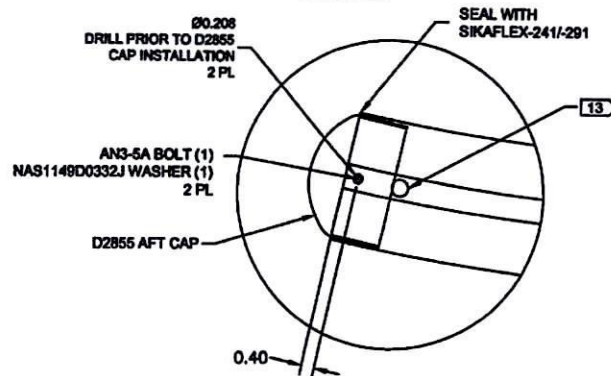
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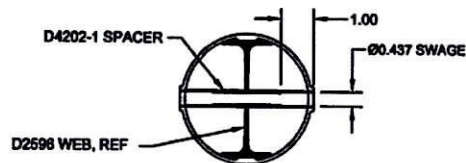
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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 8 OF 9
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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DETAIL L
SCALE 5X

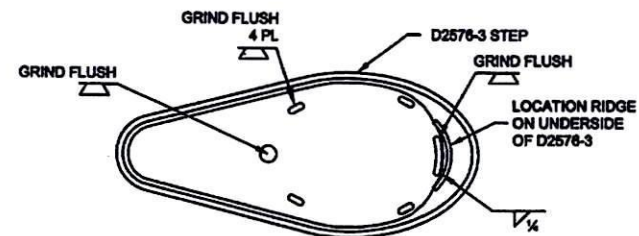


SECTION M-M
SCALE 5X



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (24 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002

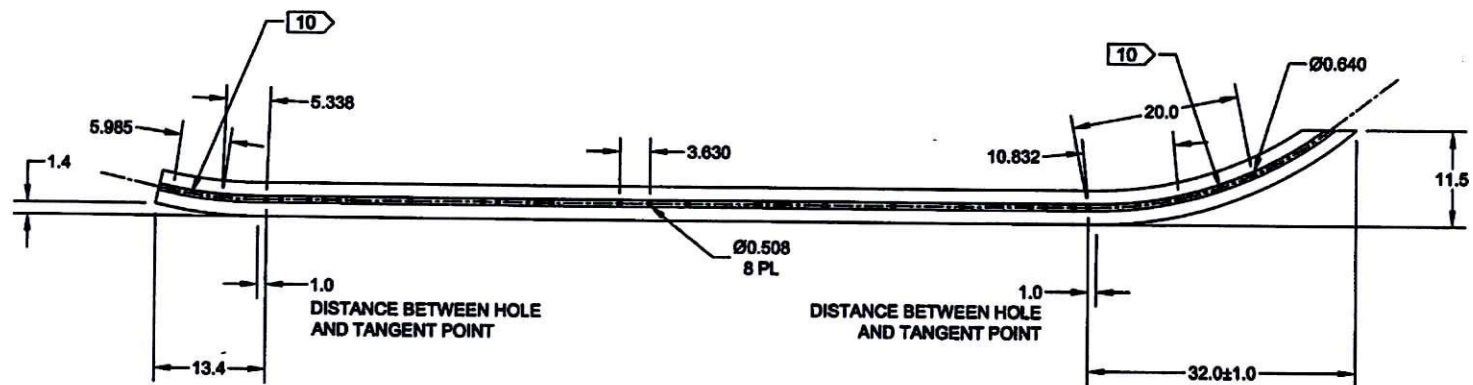
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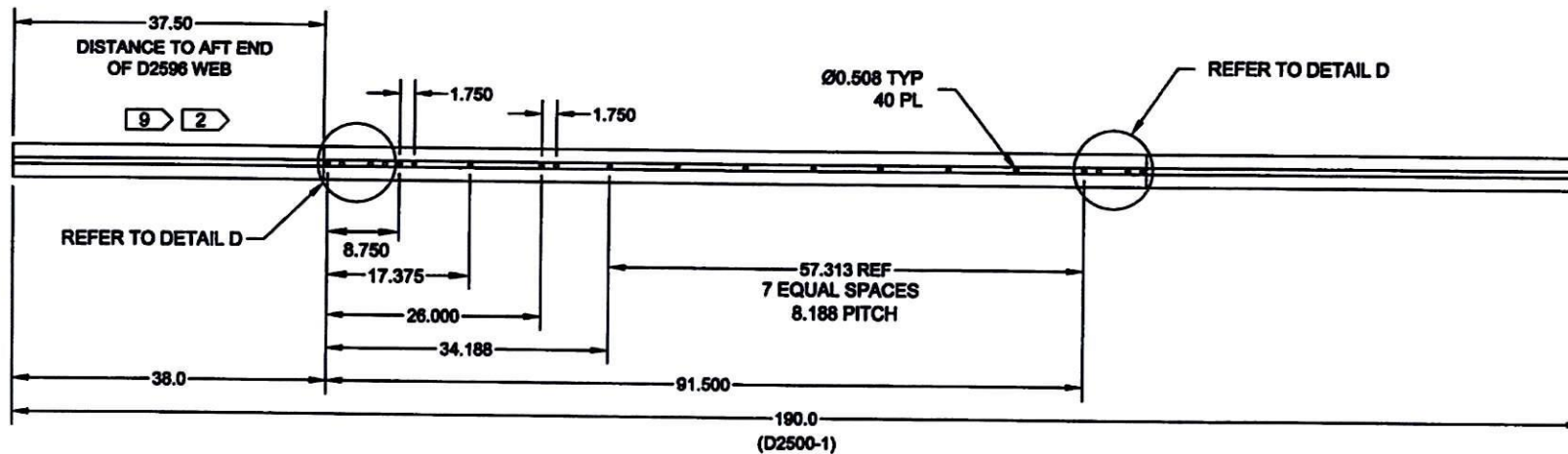
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MFG. APPR.	<i>[Signature]</i>	D2580	SHEET 7 OF 9
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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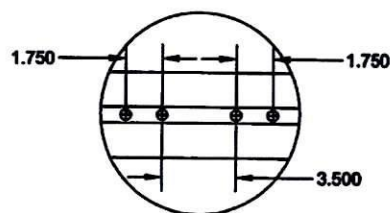
D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD		
CHECKED	<i>MB</i>	DRAWING NO. D2580	REV. H SHEET 8 OF 9
MFG. APPR.	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	205 SKIDTUBE ASSEMBLY	NTS
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